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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/824,570	04/03/2001	Christof Eberspacher	225/49834	8702

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EXAMINER
SAVAGE, JASON L

ART UNIT	PAPER NUMBER
1775	9

DATE MAILED: 03/28/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

T-D-9

Office Action Summary	Application No. 09/824,570	Applicant(s) EBERSPACHER ET AL.	
	Examiner Jason L Savage	Art Unit 1775	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *22 February 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1-55* is/are pending in the application.

4a) Of the above claim(s) *6-14 and 24-55* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-5 and 15-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *1* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Restriction Requirement

1. Applicant's election with traverse of Group I, claims 1-5 and 15-23 in Paper No. 8 is acknowledged. The traversal is on the ground(s) that the product of claim 1 requires that thermal spraying is used to form the coating and therefore the rationale provided by the Examiner for requiring the restriction is inappropriate. This is not found persuasive because the claims of Group I are ultimately drawn to a product. A product defined by the process by which it can be made is still a product claim (*In re Bridgeford*, 149 USPQ 55 (CCPA 1966)) and can be restricted from the process if the examiner can demonstrate that the product as claimed can be made by another materially different process such as the alternative process described by the Examiner in the Restriction. See *In re Brown*, 173 U.S.P.Q 685, and *In re Fessmann*, 180 U.S.P.Q. 324, for analysis of weight given to process step recitations in product claims. Applicant has not argued or show that the alternative processes suggested by the Examiner would not result in a final product which is substantially similar to the product claimed by Applicant.

The requirement is still deemed proper and is therefore made FINAL.

Claim Objections

2. Claims 2, 4 and 16-17 are objected to because of the following informalities:

Applicant should use proper Markush Group language such as stating --the solid lubricant is selected from the group consisting of-- or --coating furthermore contains at least one selected from the group consisting of--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5 and 15-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawai (US 5,969,001).

Kawai teaches a synchronizer ring having a wear-resistant coating having a porosity of 10-50% which comprises between 30-70% by weight of a solid lubricant (col. 2, ln. 21-30). The solid lubricant is graphite and has a particle diameter of 44-250 μm (col. 7, ln. 1-14). The coating may further contain metal fibers of metal particles which may be an alloy of aluminum, copper, iron, nickel, zinc or lead (col. 7, ln. 46-52).

Regarding the limitation that the coating is thermally sprayed, absent a teaching of the criticality of using a thermal spraying method, it does not provide a patentable distinction over the prior art.

5. Claims 1-5 and 15-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawamura et al. (US 5,249,661).

Kawamura teaches a wear-resistant coating on a synchronizing ring formed by flame spraying (col. 2, ln. 24-28). The coating contains between 5-30% by weight of solid lubricating

ceramic particles which may be oxides, carbides, or nitrides of elements such as Ti, Si, B, Al, Mn, Cu, Co, Ni, Na, Cr, W and V (col. 4, ln. 14-25). The porosity of the coating is between 5-30% (col. 51-60).

Regarding claims 4, 16 and 17, Kawamura teaches that the coating further includes a molybdenum alloy which may include elements such as Si and Ni (col. 3, ln. 56-59). Kawamura exemplifies that the molybdenum alloy contains Si and Ni (col. 5, ln. 67-68).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-5 and 15-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawai (US 5,969,001).

Kawai teaches what is set forth above by it does not exemplify an embodiment wherein the coating a maximum of 40% by weight of the lubricant or that the particle sizes are within the claimed ranges. However it does teach a range which overlaps the range claimed by Applicant for both the lubricant content and particle sizes. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a lubricant content of between 30-

40% by weight and lubricant particle sizes of between 50-180 μm in the coating since it is specifically stated as being a suitable composition and particle size.

Regarding the limitation that the coating has a porosity of up to 30%, Kawai exemplifies several embodiments wherein the porosity is within the range claimed by Applicant (Table 1).

8. Any inquiry to this communication or earlier communications from the Examiner should be directed to Jason Savage, whose telephone number is (703)305-0549. The Examiner can normally be reached Monday to Friday from 6:30 AM to 4:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Deborah Jones, can be reached on (703)308-3822.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)308-2351.

Jason Savage

3-19-02

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